COVID-19 and Traffic Patterns

MTMUG

JUNE 29, 2020

Potpourri of info related to COVID

Purpose: to discuss COVID related research

Resources:

- 1. TRB Webinar: How Much Will COVID-19 Affect Travel Behavior? June 1, 2020
- 2. ITE COVID-19 Traffic Volume Trends
- 3. COVID-19 IMPACTS TO MINNESOTA TRAVEL PATTERNS. April 20, 2020

The National Academies of SCIENCES • ENGINEERING • MEDICINE

TRANSPORTATION RESEARCH BOARD

B Webinar: How Much COVID-19 Affect Travel Behavior?

June 1, 2020



TRB Webinar: University of Chicago

Summary: "Which travel behavioral changes will be long-lasting, and for whom? How, if at all, are the attitudes that underpinned our American lifestyle shifting in this crisis, and will these shifts be long-terms?"

Location: https://translab.lab.uic.edu/covid-19

- 1. Located in the greater Chicagoland area
- 2. ~900 Respondents out of 1100 wanted
- 3. Realistic distribution of income and age from participants
- 4. Passive recording of results

Survey Findings: Expected on the part of this Presenter

- 1. Drop in traffic: 25-45% reduction
- 2. Mode Choice: higher perception of risk for shared modes
- 3. Discretionary shopping trips have fallen, but not as much as hospital or gym trips
- 4. Online shopping: greater intended use, from both existing and new users

Survey Findings: <u>Unexpected on the part of this Presenter</u>

- 1. Choices of the respondents:
 - 1. Almost half expected to do the same about of air travel as before, post recovery
- 2. Quantification of results:
 - 1. 75% of Full-time equivalent positions still had their jobs
 - 2. 47% of Part-time equivalent positions still had their jobs with similar hours
 - 3. Industries with greatest staff reductions; Dining/Drinks = 65%, Entertainment = 61%
 - 4. Low income [<30k], 43% had lost their jobs, while for High Income [>=150k], 11% had lost their jobs
 - 5. Telework, before 15% had done so 5 days a week, now 44%

Survey material was analyzed and the lasting effects were modeled

- 1. Teleworking and reduction in pollutants
- 2. Greater speeds within the metro area [ex. 30mph now 60mph as posted]
- 3. Different home style purchasing; greater need for a home office
- 4. Different commercial building design; less large space requirements
- 5. Growth in online, consumer AND business to business

ITE COVID-19 Traffic Volume Trends

Source: https://www.ite.org/about-ite/covid-19-resources/covid-19-traffic-volume-trends/

Clearinghome of COVID traffic impacts:

- 1. Calgary, Alberta 54% weekday reduction [March through May]
- 2. Overland Park, Kansas up to 65% reduction on local roads [March thru April]
- Florida up to -50% reduction [March to April]
- 4. Chattanooga, Tennessee up to 45% reduction [February to April]
- 5. Madison, Wisconsin up to -50% reduction [February to April]

COVID-19 IMPACTS TO MINNESOTA TRAVEL PATTERNS. April 20, 2020

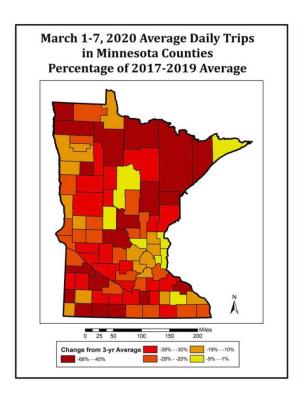
Source: http://www.dot.state.mn.us/tda/tardis/html

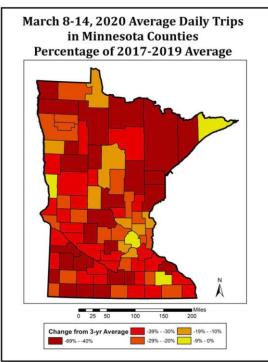
Tools and info: StreetLight, CCS

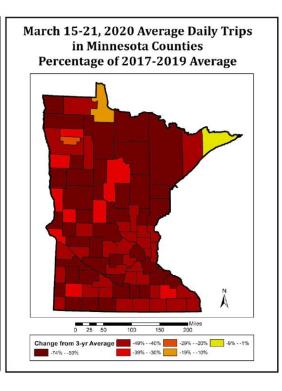
Time Period: March 2020 compared to the average of 2017-19

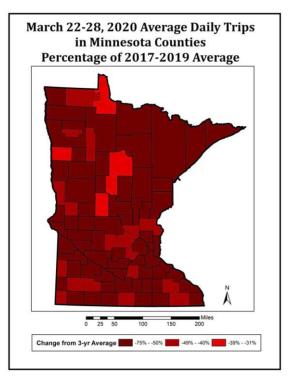
Showed the estimated changes in average trip making metrics reflecting the changes brought on by the pandemic

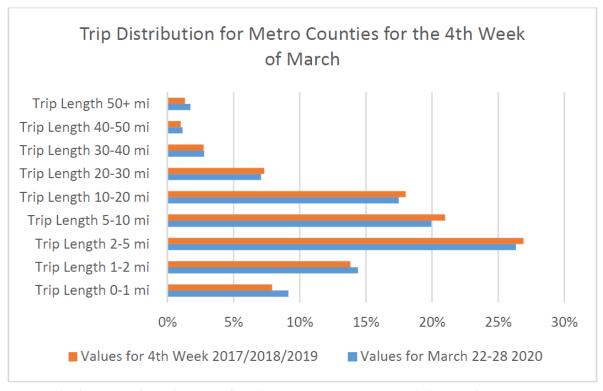
- 50% reduction: Hospitals, Nursing Homes, Activity Centers
- 70%+ reduction: Schools, MSP Airport
- Special metrics:
 - 40% less travel for lower poverty areas, 50% for higher poverty areas
 - 60% less travel for Tribal Nations



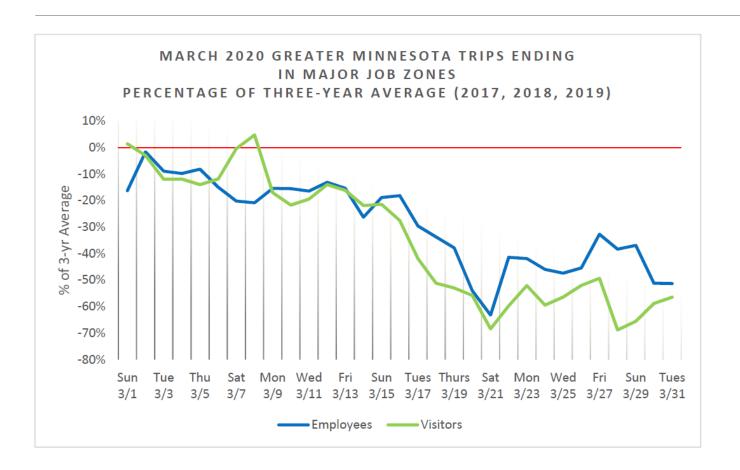








Overall, the trip distribution for the Metro Counties did not change significantly when comparing the four weeks in March to similar weeks in 2017, 2018, and 2019.



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Thank you for your attention